

Why we need a standard

The heart of any good business is to satisfy the customer. A print buyer with good original artwork should be able to rely on his printers to produce a satisfactory result.

Unfortunately, there are aspects of the printing process that can lead to problems. Making colour separations, proofing, platemaking and presswork always take place in different departments and may take place in different companies. Nowadays it is common for the proofs to be purchased from one house, and the main reproduction from another. Perhaps it is not too surprising that proofing houses often make proofs to a standard that cannot be matched on a production press. Obviously, this gives the customer a misleading expectation of the final product. This can result in customer complaints, plate remakes, lost press time, general disappointment and perhaps lost orders in future. Similar problems occur when, as often happens, colour separations made to differing standards come together on the same press. It is impossible to adjust the press conditions to optimise all the separations simultaneously.

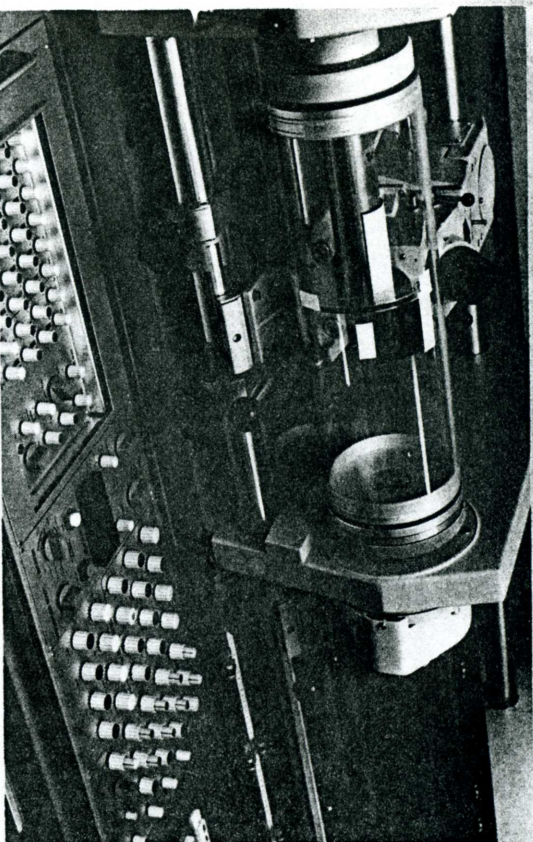
When these problems occur it is in the nature of things that the pressman and the pressroom supervisor will take the blame. But they cannot control what happens at the proofing or separation stages. Production presses are inherently less flexible than proofing presses, and so it follows that the early stages in the printing process must be organised so that a good and predictable quality can be achieved on the typical production press.

If all presses could be made to print in a similar fashion on a given paper, and all proofs were made with the same characteristics as the production run, then all colour separations could be made to the same standard. Compromises on the press would be avoided, proofs would be meaningful, and customers would get a satisfactory result.

All this can be achieved by working to a common standard throughout the process. Pira has created a Specification for each stage of the process based on the need to control dot gain, which is the most important variable in the process. This kit contains the procedures which should be used to achieve the Specification, and explains what controls and adjustments are needed at each stage.

The colour reproduction process

For colour printing the original is analysed into the four components yellow, magenta, cyan and black. This colour separation process is usually done by a colour scanner, a complex and sophisticated piece of electronic equipment.



Transparency scanning drum and control panel of a typical scanner.

THE ORIGINAL AND ITS ASSESSMENT

In colour reproduction there is no substitute for a good original, which will most often be in the form of a colour transparency. It should be well exposed, sharp, free from colour casts and blemishes. With high and low key subjects, the best looking transparency is not necessarily the one which will give the desired result and in these cases it is worth consulting your trade house or printer BEFORE making a transparency.

The appearance of transparencies is greatly influenced by the conditions in which they are viewed. You must use lighting which conforms to BS950 Part II or ISO3644. The brightness of the immediate surround to a transparency also greatly affects its appearance. You should be sure that there is a clear understanding between all parties as to the required interpretation of a transparency.